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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,655	11/13/2000	Michael A. Freeman	1894-00501	7877

23505 7590 10/24/2002  
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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/24/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

711655

Applicant(s)

FREEMAN

Examiner

P. TUCKER

Group Art Unit

1712

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-17, 19-27, 30-37, 39-49, 86-103 is/are pending in the application.  
Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 102 is/are allowed.
- ☒ Claim(s) 1-3, 19-21, 31-37, 39, 40, 43, 44, 46, 49, 86, 90, 93-98 is/are rejected.
- ☒ Claim(s) 4-17, 22-27, 30, 41, 42, 45, 47, 48, 91, 92, 99-101, 103 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 19-21, 31, 32, 34-37, 39, 40, 43, 44, 46, 49, 86-90, 93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Gupta (5437331).

Gupta teaches a fluid used for fracturing a subterranean formation which comprises a polymer viscosifier, and an encapsulated breaker which may contain an enzyme (see abstract, column 8, lines 25-34). Gupta teaches that the enzyme may be released by pressure, diffusion or volatilization (column 5, lines 15-20).. Applicants claiming of a triggering signal is not precise, thus even diffusion would qualify as anticipating applicants claims. Furthermore, applicant has not defined the "normal conditions", or what abnormal conditions encompass, so as to distinguish from the prior art. With respect to claim 46, the polymer becomes a contaminant prior to cleanup.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 20, 21, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (5437331).

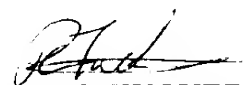
Gupta teaches a fluid used for fracturing a subterranean formation which comprises a polymer viscosifier, and an encapsulated breaker which may contain an enzyme (see abstract, column 8, lines 25-34). Gupta teaches that the enzyme may be released by pressure, diffusion or volatilization (column 5, lines 15-20). Gupta differs from the present invention in not teaching iso or exo-amylases. However, such would be obvious to one of ordinary skill in the art over the teaching of amylase by Gupta (column 8, lines 22-24).

5. Claims 4-17, 22-27, 30, 41, 42, 45, 47, 48, 91, 92, 99-101 and 103 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9310. The **after final** fax no. Is 703-872-9311.

PCT-2664  
October 21, 2002

  
**PHILIP C. TUCKER**  
**ART UNIT 1712**